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Chun-Der Chen Department of Business Administrati on, Ming Chuan Universi t y, Tai pei, Tai wan, R.O.C., marschen@mail.mcu.edu.tw

Edward C.S. Ku Department of Travel Management, Nati onal Kaohsiung Universi t y of Hospi tali t y and Touri sm, Kaohsi ung, Tai wan, R.O.C., edwardku@mail.nkuht.edu.tw

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# BUILDING MEMBER'S RELATIONSHIP QUALITY TOWARD ONLINE COMMUNITY FROM THE ELABORATION LIKELIHOOD MODEL PERSPECTIVE

- Chun-Der Chen, Department of Business Administration, Ming Chuan University, Taipei, Taiwan, R.O.C., <u>marschen@mail.mcu.edu.tw</u>
- Edward C.S. Ku, Department of Travel Management, National Kaohsiung University of Hospitality and Tourism, Kaohsiung, Taiwan, R.O.C., edwardku@mail.nkuht.edu.tw

## Abstract

This study proposes a set of hypotheses based on the perspective of the elaboration likelihood model (ELM) of persuasion, a conceptual model that explains the formation of member's relationship quality and subsequent behavioral loyalty that are prompted by central and peripheral cues, namely argument quality and source credibility. Moreover, we also argue that the extents to which argument quality and source credibility influence the formation of relationship quality are moderated by two factors: member's perceived personal relevance and user expertise. Based on a sample of 320 members from several well-known interest-based online communities, our research findings show that (1) both argument quality and source credibility have positive effects on member's perceived relationship quality has a positive and significant effect on behavioral loyalty; and (2) both personal relevance and user expertise positively moderate the relationship between argument quality and relationship quality, and negatively moderate the relationship between source credibility and relationship quality. Implications for practitioners and researchers and suggestions for future research are also addressed in this study.

Keywords: Elaboration likelihood model, argument quality, source credibility, relationship quality, behavioral loyalty, online community.

## **1 INTRODUCTION**

Accelerated by the tremendous growth of the Internet and associated information technologies (IT), online communities have emerged as a major phenomenon and are increasingly becoming an integral part of the social lives of Internet users and companies. Of special relevance to online users are interest-related communities, which provide content on specific topics or discussion forums for people to find detailed product information, share their opinions, or evaluate others' usage experiences (Hung and Li, 2007), thereby offering new ways for community administrators to promote deep relationships, improve the creation and synthesis of knowledge for products and services, and even generate more commercial transactions and advertising revenue (Lee et al., 2011).

However, since the Internet makes it relatively easy to switch from one website to another that provides the same products or services, many online communities must continually strive to remain successful. Whether online communities are marketer-sponsored brand communities or consumer-centered social communities, they still have to generate value for their members in order to remain competitive in maintaining active member participation, attracting new members, or even receiving advertising support. The business value lies in the quality of relationships between online communities and their members, thereby nurturing and strengthening members' sustained loyalty to the sites (Lin et al., 2008).

Previous studies have demonstrated the importance of relationship quality and loyalty and their impact on firm profitability and customer retention (e.g., De Wulf et al., 2001; Kim and Han, 2008; Morgan and Hunt, 1994). Research has also demonstrated that relationship investment (e.g., bonding tactics) can shape user perceptions regarding the quality of their relationship with a retailer, thereby indirectly influencing users' loyalty (De Wulf et al., 2001). Despite these studies, our understanding of the nature, patterns, and outcomes of influences on the development of relationship quality within online communities remains scant. For example, issues regarding what type of information is most effective in influencing user perceptions and forming quality relationships, as well as whether such influences apply equally across user populations, are far from conclusive.

As Jin et al. (2010) argued, though online communities are established by computer-mediated communication media, the most valuable resources are member-generated content and recommendations within those platforms. The information co-created by users significantly influences relationship quality and loyalty development. Thus, the objective of this study is to draw on the elaboration likelihood model (ELM) to advance our understanding of the informational influences on the development of relationship quality and the consequent impact on members' loyalty to online communities. Especially, we investigate the role of two information-processing modes—systematic processing (central route) and heuristic processing (peripheral route)—in motivating members' relationship quality. This paper proceeds as follows: we first review background theoretical foundations from previous literature and then advances the research model and hypotheses. Then we detail the research design and the study context, and finally we discuss the research findings, limitations, implications and potential topics for future research.

## 2 THEORETICAL BACKGROUND AND HYPOTHESES

## 2.1 Elaboration likelihood model

In order to gain a better understanding of how consumer attitudes form and change, Petty and Cacioppo (1981) developed ELM to represent a general framework for understanding how an individual deals with various appeals and the effectiveness of persuasive communications. According to ELM, individuals exposed to persuasive messages are thought to use either a central route or a

peripheral route, which differ in the amount of thoughtful information processing or "elaboration" demanded of individual subjects, to form attitudes (Martin et al., 2011). The individual's motivation or prior knowledge of information processing determines the degree of elaboration likelihood. When people's motivation or prior knowledge of how to engage in message-relevant thinking is high, they elaborate issue-relevant arguments or cues (e.g., price, functional specifications) through a central route. On the contrary, individuals use a peripheral route when their involvement is low, they are unmotivated to think about the message, or they are unable to process message-relevant arguments.

Following the tenets of ELM, we will examine two major classes of persuasion determinants that are directly related to attitude and belief change, namely argument quality and source credibility. **Argument quality** refers to the persuasive strength of arguments embedded in an informational message. Presence of evidence, ease of comprehension, opposing viewpoints, and comprehensiveness are possible dimensions of the construct of argument quality (Li and Zhan, 2011). **Source credibility** is defined as the extent to which an information source is perceived to be believable, competent, and trustworthy by information recipients (Bhattacherjee and Sanford, 2006).

## 2.2 Relationship quality

Relationship quality can be described as the degree to which a relationship is appropriate for fulfilling the needs of the customer associated with the relationship (Hennig-Thurau and Klee, 1997). Although there is no consensus regarding the structural nature of relationship quality, most studies agree that relationship quality mainly includes three critical indicators: satisfaction, trust, and commitment (De Wulf et al., 2001). An individual's satisfaction with a relationship is treated as an affective state resulting from an overall appraisal of his or her relationship with a provider. It has been found to be a primary indicator and source of confirmation of needs and, therefore, a critical driver of positive experience behavior in marketing-related literature (De Wulf et al., 2001). Trust has been conceptualized as the relationship collaborators' self-assurance that they have developed reliability and integrity between them and as a belief that the other collaborator will only perform actions that result in positive outcomes (Morgan and Hunt, 1994). Lastly, commitment is defined as an attitude that reflects the desire to maintain a valued relationship. Commitment is one of the cornerstones that is essential for the establishment of successful relationships and has been accepted as the focal construct preceding customers' positive relational behaviors (Bansal et al., 2004).

# 2.3 Impacts of the dual processing modes on the formation of relationship quality in online communities

As mentioned earlier, the key postulate of ELM holds that attitude change can result from processes that are relatively more (central route) or less thoughtful (peripheral route). When members of online communities assess the validity of the content in a message related to a particular product issue or problem, they are sufficiently motivated to engage the central route, scrutinizing issue-relevant arguments and judging the merits of the received information. In interest-based communities, members compose and reply to messages to provide other members with helpful information. When members read a message and respond favorably to quality content provided by an online community forum, these perceptions lead them to have a positive attitude toward the forum. As a result, we argue that perceiving greater argument quality can induce members to be highly satisfied, trusting, and committed to an online community since their shared values and interests have been reinforced, thereby strengthening their higher relationship quality with the community. Based on these arguments, we make the following hypothesis:

Hypothesis 1 (H1): The argument quality of informational messages has a positive effect on members' perceived relationship quality with online communities.

In addition to the central route, individuals who lack motivation or ability are more likely to process related information via peripheral routes such as source credibility, which are mental shortcuts, by focusing on non-content cues (Park et al., 2007). In the context of online communities, perceptions of source credibility also play an important role in people's judgments of cognitive authority (Sussman and Siegal, 2003). For example, an author's name, the number of messages an author has posted, the number of replies that other members have made to an author's messages, and the seniority ranking of authors are usually displayed together with a message, making it possible to use source credibility as a heuristic cue, particularly when multiple messages by the same source have been read (Zhang and Wats, 2008). For this reason, we argue that source credibility is likely to influence members' perceived relationship quality with an online community because such cues appeal to human emotions, rather than their rational judgment (Bhattacherjee and Sanford, 2006). Hence, we hypothesize the following:

Hypothesis 2 (H2): The source credibility of informational messages has a positive effect on members' perceived relationship quality with online communities.

#### 2.4 Member's behavioral loyalty

Customer loyalty is a consumer's overall attachment to a product, service, brand, or organization. Customer loyalty manifests itself in a variety of behaviors, the most common of which are repeatedly patronizing a service provider and recommending the provider to other customers (Lam et al., 2004). There is fruitful empirical support for the relationship between relationship quality and loyalty. For example, De Wulf et al.'s (2001) findings in the food and apparel industries showed that relationship quality is positively related to consumers' higher level of behavioral loyalty in terms of purchasing frequency and amount spent at a retailer. In the context of online games, Lin et al. (2008) found that gamers who fostered higher perceptions of relationship quality toward the games responded with a more positive emotional mood, which led to increased loyalty. Following the same line of logic, in the context of online communities, we argue that satisfied and trusting members will identify with and commit to positive and repeated behavioral loyalty to the community in terms of their visiting frequency, average staying time, and recommendation frequency. Based on the above arguments, the following hypothesis is proposed:

Hypothesis 3 (H3): A higher perception of relationship quality leads to a higher level of behavioral loyalty from members to online communities.

#### 2.5 Moderating roles of personal relevance and user expertise

Previous studies indicate that people's motivation and ability play key roles in their evaluation of persuasive messages because they alter people's levels of elaboration likelihood (Bhattacherjee and Sanford, 2006; Zhang and Watts, 2008). As a result, we argue that the effects of argument quality and source credibility are moderated by community members' motivation and ability to elaborate on the formation of relationship quality with online communities.

Drawing on prior ELM-related studies, we operationalizes (1) the motivation dimension of elaboration as personal relevance, defined as the online community member's perception of the relevance of the message content posted within communities (Sussman and Siegal, 2003), and (2) the ability dimension of elaboration as user expertise, defined as the community member's ability to comprehend the message topic in general (Bhattacherjee and Sanford, 2006). Higher levels of personal relevance will significantly enhance the influence of argument quality on the formation of members' relationship quality with online communities since highly involved people are more motivated to scrutinize all available information, which requires more effort, thereby forming more informed and stable perceptions of satisfaction, trust, and commitment toward the community. On the contrary, lower levels of personal relevance cause members to be less motivated to engage in extensive elaboration and to be more influenced by the attractiveness of the characteristics of message-content issuers, the peripheral cues such as the source credibility of the message content. Therefore, we argue that the effect of argument quality on relationship quality is moderated by the member's motivation to elaborate, as reflected in their level of personal relevance. Thus, we hypothesize the following:

Hypothesis 4 (H4): Personal relevance has a positive moderating effect on the association between argument quality and members' perceived relationship quality with online communities.

Hypothesis 5 (H5): Personal relevance has a negative moderating effect on the association between source credibility and members' perceived relationship quality with online communities.

Following the same logic, the prior expertise of the message recipient also alters elaboration likelihood by affecting the individual's ability to process the message (Sussman and Siegal, 2003). In online communities, expert users attend more strongly to the quality of arguments and, thus, rely less strongly on peripheral cues, such as source credibility. Conversely, members who are non-experts or novice users are more likely to rely on peripheral cues, which are mental shortcuts that focus on non-content cues, to process message content. Hence, we propose the following:

Hypothesis 6 (H6): User expertise has a positive moderating effect on the association between argument quality and members' perceived relationship quality with online communities.

Hypothesis 7 (H7): User expertise has a negative moderating effect on the association between source credibility and members' perceived relationship quality with online communities.

We summarized the above hypotheses and presented our overall research model in Figure 1.

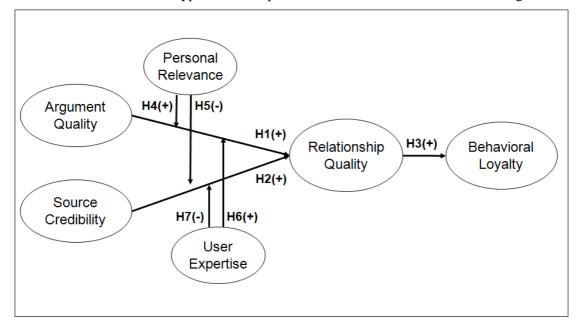


Figure 1. Research model

## **3 METHODOLOGY AND RESEARCH DESIGN**

#### 3.1 Sample and data collection

In order to test our hypotheses, data was collected by using an online survey questionnaire sent to members of several well-known interest-based online communities in Taiwan, including Fashion Guide (<u>http://www.fashionguide.com.tw</u>), Mobile01 (<u>http://www.mobile01.com</u>), Map Diary (<u>http://www.atlaspost.com/main.php</u>), DCView (<u>http://www.dcview.com</u>), and several softwaredevelopment discussion communities, such as Microsoft MSDN (<u>http://www.microsoft.com/taiwan/forum</u>).

For example, Mobile01 is the biggest 3C consumption electronic product interest-based community in Taiwan, and its audience is made up of 3C lovers, novice users, experts, technicians, and many other people from the related industry and beyond. It offers members a place to post, share, and reply to messages about common interests, thereby developing their social network and relationships. Fashion Guide is the biggest and most well-known fashion and cosmetic discussion community in Taiwan and China. Since its inception in 1997, Fashion Guide has grown its member base to 1.98 million registered users, primarily through word of mouth and viral networking.

We developed an online version of our survey and posted its URL on the above online communities for about two months. In order to increase the response rate, all participating users were offered a monetary incentive and a chance to win a prize in a lottery. The online survey yielded 331 completed questionnaires. Since 11 questionnaires were invalid, we obtained 320 valid responses.

About 52% of the respondents were male and 48% were female. A majority (70.94%) of the subjects was between the ages of 18 and 30 and had at least a Bachelor's degree. They were also frequent and experienced members of the communities. Around 87.5% of the participants visited online communities 10 or fewer times every week, and 61.56% reported that the average time they visited online communities was 5-30 minutes per visit. Another 28.44% of the participants said their visits lasted 30-60 minutes. Moreover, 86.94% of the respondents said they had recommended the online community to their friends two or fewer times, showing the significant effect of word of mouth on online communities.

## **3.2** Measurement development/operationalization of constructs

All constructs were measured by using multiple-item perceptual scales that used pre-validated instruments from prior studies whenever possible and were reworded to relate specifically to the context of online communities. Items used to measure argument quality and source credibility were from Bhattacherjee and Sandford (2006), and items used to measure personal relevance and user expertise were adapted from Sussman and Siegal's (2003) research. Relationship quality was measured using nine items adapted from De Wulf et al. (2001), and we adapted items from Algesheimer et al. (2005) to measure members' behavioral loyalty. The preliminary instrument was pilot tested and reviewed by faculty and doctoral students for clarity, and the questionnaire items were modified following a pretest of the survey instrument with a certain number of real-case respondent samples.

## 4 DATA ANALYSIS RESULTS

## 4.1 Convergent and discriminant validity

We conducted the data analysis in two parts: scale validation and hypothesis testing. Scale validation proceeded in two phases: convergent and discriminant validity analyses. Convergent validity of scale items was assessed using three criteria suggested by Fornell and Larcker (1981): (1) all item factor loading (alpha) should be significant and exceed 0.5, (2) composite reliabilities (CRs) for each construct should exceed 0.8, and (3) average variance extracted (AVE) for each construct should exceed 0.5 (in other words, the square root of AVE should exceed 0.71). In addition, internal consistency reliability is generally considered a necessary but not sufficient condition for convergent validity. Hence, Cronbach's alpha, which should be larger than 0.7, was also computed for each construct (Nunnally, 1978).

Standardized confirmatory factor analysis (CFA) loadings for all scale items in the CFA model are significant at p < 0.001 and exceed the minimum loading criterion of 0.5. Besides, as illustrated in Table 1, the AVE of each construct exceeds 0.5, and CRs and Cronbach's alpha for all factors exceed the required minimum of 0.8 and 0.7 respectively. Hence, all three conditions for convergent validity are met.

Construct	Mean	S.D.	Cronbach's Alpha	Composite Reliability	AVE	1	2	3	4	5	6
1. ARG	5.05	1.19	0.92	0.94	0.81	0.90					
2. SRC	4.60	1.15	0.90	0.93	0.78	0.58	0.88				
3. RQ	4.48	1.16	0.91	0.93	0.60	0.54	0.72	0.78			
4. LOYAL	2.20	1.03	0.71	0.82	0.61	0.30	0.30	0.35	0.78		
5. PER	3.86	1.62	0.93	0.97	0.94	0.22	0.15	0.21	0.17	0.97	
6. EXPERT	4.70	1.22	0.90	0.94	0.84	0.20	0.29	0.23	0.23	0.03	0.92

Notes:

a. The main diagonal shows the square root of the AVE (averaged variance extracted).

b. Significant at p <.01 level is shown in bold.

c. ARG as for argument quality, SRC as for source credibility, RQ as for relationship quality, LOYAL as for behavioral loyalty, PER as for personal relevance, and EXPERT as for user expertise.

### Table 1. Reliability, correlation coefficients and AVE Results

Meanwhile, discriminant validity is the degree to which measures of two constructs are empirically distinct. Discriminant validity is shown when the square root of each construct's AVE is larger than its correlations with other constructs (Chin et al., 2003). From the data presented in Table 2, we can see that the highest correlation between any pair of constructs in the CFA model was 0.72, between relationship quality (RQ) and source credibility (SRC). This figure is lower than the lowest square root of AVE among all of the constructs, which was 0.78 for members' relationship quality (RQ). Hence, the discriminant validity criterion was also met for our data sample.

### 4.2 Hypothesis testing—main effects

First, we examined the main effects specified in hypotheses H1 through H3 by using bootstrap analysis in the partial least square (PLS) method (Chin et al., 2003). We then investigated the moderating effects (hypotheses H4 through H7) by adding interaction terms that were modeled in PLS as products from the standardized indicators of a moderator variable and a predictor variable (Chin et al., 2003). Bootstrap analysis was done with 500 subsamples, and path coefficients were re-estimated using each of these samples. With regard to the specific hypotheses for main effects illustrated in Figure 2, we found the following:

**Hypotheses H1 and H2:** Our results supported the hypotheses that both argument quality (beta = 0.186, p < 0.001) and source credibility (beta = 0.613, p < 0.001) have significant and positive effects on users' perceived relationship with online communities. These two factors jointly explained 54.3% of the variance in relationship quality, with source credibility contributing a larger proportion.

**Hypothesis H3:** As expected, relationship quality had a strong and significant effect (beta = 0.351, p < 0.001) on members' behavioral loyalty, accounting for 12.3% of the variance in members' behavioral loyalty.

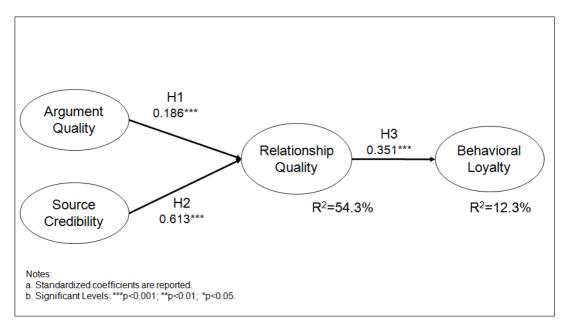


Figure 2. Hypotheses testing – Main effect results

### 4.3 Hypothesis testing—moderating effects

Following Sussman and Siegal's (2003) suggestions, the hypothesized moderating effects were analyzed separately since these effects are in opposing directions and would therefore obscure one another. As shown in Table 2, we found that personal relevance strongly moderates the effect of argument quality on relationship quality, and the positive path coefficient (beta = 0.183, p < 0.01) is in the same direction as predicted by our theory, supporting the argument of hypothesis H4. The path coefficient (beta = -0.08, p < 0.05); thus, hypothesis H5 is also supported. Furthermore, user expertise strongly moderates the effects of argument quality (beta = 0.196, p < 0.05) and source credibility (beta = -0.107, p < 0.05) on relationship quality, and both the positive and negative path coefficients are in the same direction as predicted by our theory, thereby supporting the arguments of hypotheses H7 and H8. We discuss these findings in detail in the next section.

	Main Effect	Moderator	Interaction Term	
H4: Argument Quality	Beta = 0.525	Beta = 0.131	Beta = 0.183	
x Personal Relevance	t= 14.596	t=2.963	t= 3.053	
	Sig. T = 0.001***	Sig. T = 0.01**	Sig. T = 0.05**	
H5: Source Credibility	Beta = 0.697	Beta = 0.109	Beta = -0.080	
x Personal Relevance	t= 21.691	t= 2.625	t= -2.24	
	Sig. T = 0.001***	Sig. T = 0.01**	Sig. T = 0.05*	
H6: Argument Quality	Beta = 0.485	Beta = 0.158	Beta = 0.196	
x User Expertise	t= 12.256	t= 3.126	t= 2.79	
	Sig. $T = 0.001^{***}$	Sig. $T = 0.01 * *$	Sig. T = 0.01**	
H7: Source Credibility	Beta = 0.702	Beta = 0.045	Beta = -0.107	
x User Expertise	t= 21.538	t= 1.227	t= -2.174	
	Sig. T = 0.001***	Sig. T = 0.19	Sig. T = 0.05*	

 Table 2.
 Results of regressions testing for moderation effects, H4 to H7

## 5 **DISCUSSION**

This study aims to fill the research gap in our understanding of the processes that influence the development of members' relationship quality and the consequent impact on behavioral loyalty to online communities by using the ELM perspective. In the study, we found that both argument quality and source credibility yield significant and positive relationship quality, thereby generating members' sustained behavioral loyalty to online communities. Our findings also support the moderation hypotheses H4 through H7, postulating that members' motivation (personal relevance) and ability (user expertise) serve as critical moderators of the argument quality-relationship quality and source credibility-relationship quality associations.

First, both argument quality and source credibility were found to directly affect members' relationship quality. The influences of the central and peripheral routes are not mutually exclusive in the context of our study—they are both important ways of influencing the formation of members' relationship quality. This result implies that in order to facilitate members' closer relationship quality with online communities, using diverse credible resources for discussion contents will have a stronger effect than providing better argument quality for discussion contents. When facing huge amounts of qualified informational content, credible resources, such as an author's name or seniority ranking, serve as very useful heuristic cues to help users efficiently evaluate products and make decisions. As a result, the related hypotheses (H1 and H2) are supported.

Second, we found that relationship quality was positively related to members' behavioral loyalty to online communities, which is consistent with prior findings in several online environments (e.g., Henning-Thurau and Klee, 1997; Liu et al., 2011). When a satisfied member trusts and makes a commitment to an online community, it also means the member wants to have a long-lasting relationship with the community, thereby gradually increasing his staying time, frequency of visits, and recommendation frequency, which reflect his behavioral loyalty to the community. Therefore and as expected, higher relationship quality will induce members' stronger behavioral loyalty to online communities.

Third, we also wanted to understand whether different levels of members' personal relevance (motivation) and user expertise (ability) could significantly moderate the relationships between argument quality-relationship quality and source credibility-relationship quality. We found that all moderating hypotheses were supported, and the positive and negative path coefficients are in the same direction as predicted by our theory. Consistent with several prior findings (e.g., Bhattacherjee and Sanford, 2006; Sussman and Siegal, 2003), as personal relevance and user expertise increase, people are more motivated to process issue-relevant arguments. People with more issue-relevant motivation and prior knowledge tend to enjoy cognitive tasks that require more effort and evaluate messages by scrutinizing and elaborating on issue-relevant arguments (Huang et al., 2006). As a result, higher personal relevance and user expertise positively and significantly moderate the relationship between argument quality and relationship quality and negatively moderate the relationship between source credibility and relationship quality. Therefore, the moderation hypotheses are also supported.

## 6 IMPLICATIONS AND CONCLUSIONS

For researchers, although prior ELM-based studies had applied the theory within other contexts, such as IT acceptance, decision making, or knowledge acceptance (e.g., Bhattacherjee and Sanford, 2006; Sussman and Siegel, 2003), this study not only reinforces the findings from prior ELM-based studies, but especially illuminates two types of influential processes, both central and peripheral routes, that can effectively achieve the desired attitude change in the context of online communities. As a result, argument quality and credible sources are two viable ways to influence and thus form members' attitudes toward online communities in terms of satisfaction, trust, and commitment. By focusing on these two influential information processes, we have been able to apply a well-developed body of

ELM perspectives to the problem of understanding antecedents of members' relationship quality formation and subsequent behavioral loyalty in the online community context.

For practitioners, the present study can help managers of online communities recognize the differential effects of these information processes across a user population and customize optimal strategies that best fit the unique characteristics of their community members. The argument quality of members' cocreated information content is definitely a precondition of running interest-based communities because it plays the central role for higher elaboration likelihood members to first scrutinize all relevant information and make their judgments afterwards. Interest-based online communities that do not emphasize qualified content will hardly attract potential members and run the risk of activating negative thoughts that are potentially intense and long lasting.

Moreover, in addition to higher quality information content, our study also showed that source credibility is another important and more influential way to foster members' relationship quality. This also implies that credible sources or presentation schemes for information content will exert a greater influence on the formation of members' relationship quality in terms of satisfaction, trust, and commitment to the online community, compared to the effect of argument quality. Consequently, it is crucial to provide various indicators of source credibility for information content. For example, when posting messages, profiles, credible rankings, or seniority of members could be shown next to the messages. The "like" button developed by Facebook is also a good approach to generating better message source credibility. The participation of well-known field experts for interest-related issue discussions may be another feasible way to enhance the credibility of community content. Finally, periodic events for members to select the most updated and useful information content are also very effective ways to strengthen the development of source credibility.

We acknowledge that a number of research limitations exist in our research, which should be overcome in the future. First, we conducted the research using the member base from various popular interest-based online communities in Taiwan. Although this was a strength of the study, these samples may not allow researchers to draw more general conclusions across different types of community contexts, thus limiting the extent to which the findings can be generalized. Examining our research model across different types of online communities—not only interest-based ones but also other types, such as transaction-, relationship-, or fantasy-based ones—would help establish the generalizability of these results beyond the current context.

Second, since the respondents of this study are from Taiwan, our research model is unable to examine cultural effects. Cultural differences may present different degrees of variations in cue diagnosticity (Aaker and Maheswaran, 1997). Likewise, future studies may benefit from observing the different degrees of various cultural influences on the research model by collecting more data and comparing the results from different countries, such as other Asian-Pacific countries, the U.S., or European countries.

Lastly, we operationalized and investigated one peripheral cue in this study, namely source credibility. As Bhattacherjee and Sanford (2006) stated, source credibility might be viewed differently by users depending on the extent of their elaboration, resulting in idiosyncratic effects on the dual process model. As a result, we recommend that future researchers investigate the effects of various types of credible sources (e.g., author's name, number of members' replies to information content, author's seniority) on the formation of members' relationship quality with online communities.

In sum, these questions open up fertile grounds for future research opportunities. Exploring these potential dynamics would be a helpful contribution to our understanding of service management and the retention of members in the long term for online communities.

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